

An aerial photograph of a wetland area, showing a complex network of water channels and a road. The water channels are dark green and brown, winding through the landscape. A road, likely a highway, runs diagonally from the top left towards the center. The surrounding land is a mix of green and brown, indicating a natural, undeveloped area.

# SUSTAINABLE INFRASTRUCTURE

CITY OF HAYWARD

DOWNTOWN SPECIFIC PLAN

MARCH 2017





DEVELOPMENT



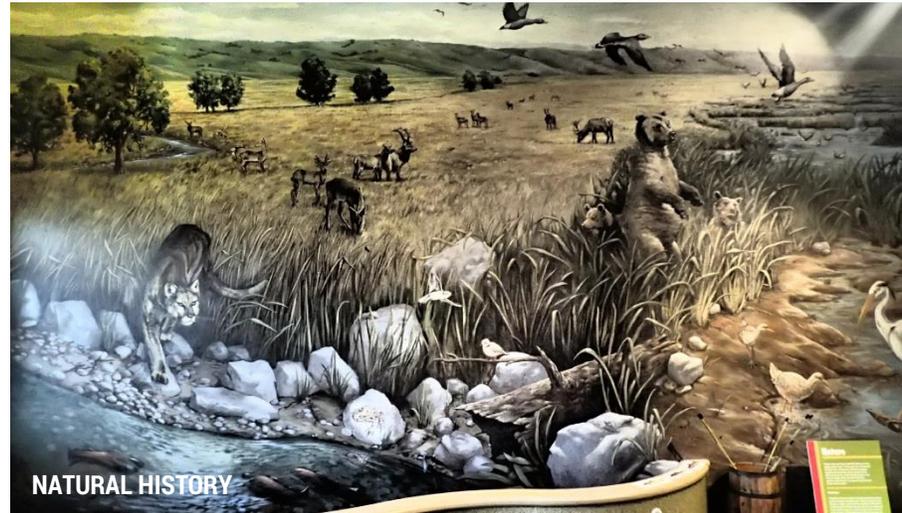
ART



OPPORTUNITY



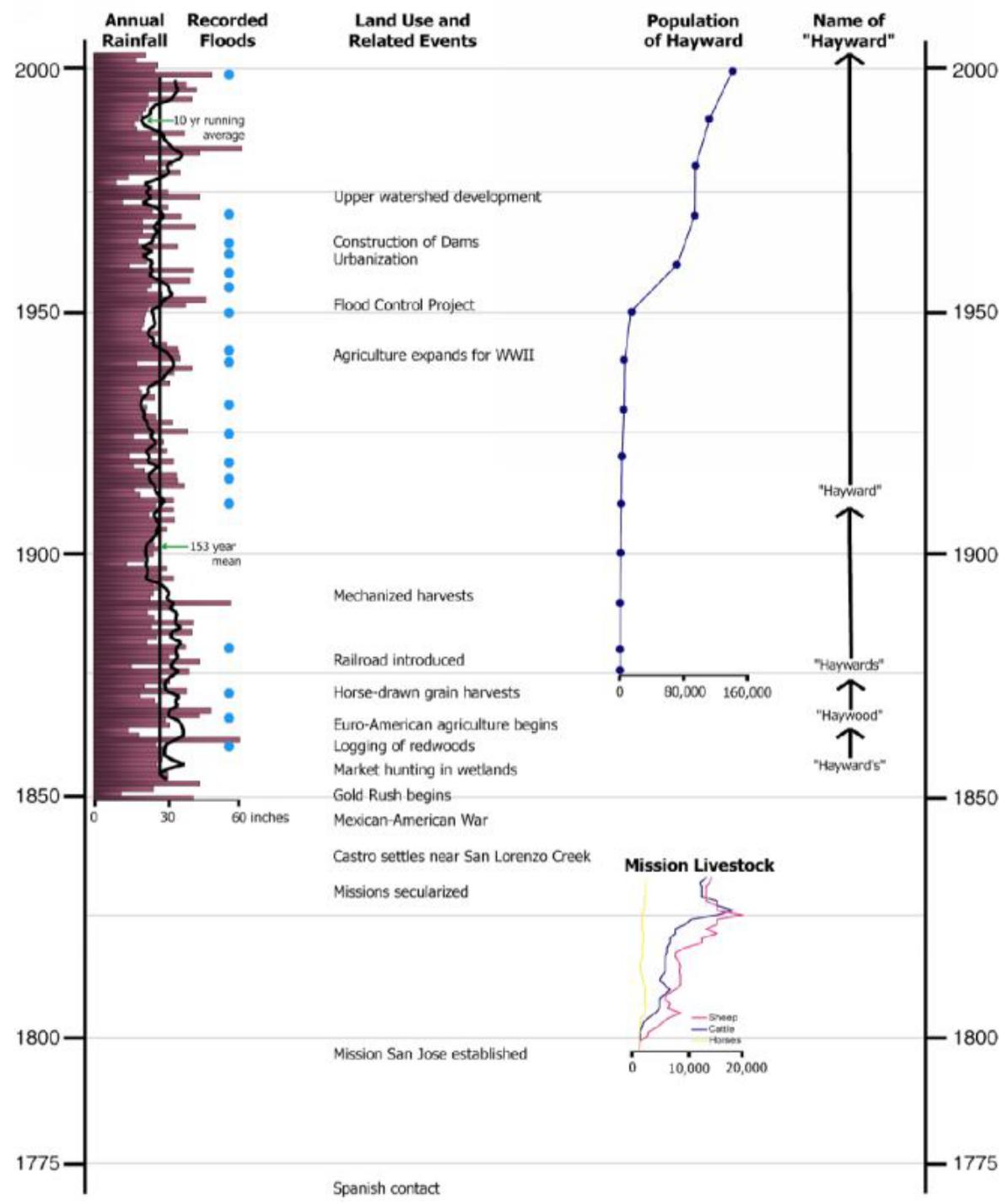
ECONOMY



NATURAL HISTORY

# ON-SITE OBSERVATIONS

# A GEOGRAPHIC HISTORY OF SAN LORENZO CREEK WATERSHED



# **ECOLOGICAL TRANSFORMATION**

**1**

# HISTORICAL ECOLOGY



\*NATIVE TRIBES OF THE EAST BAY  
PRE-EUROPEAN COLONIZATION

MAP SOURCES:  
- EASTBAYPARKS.ORG  
- ECOATLAS.ORG

# LANDSCAPES



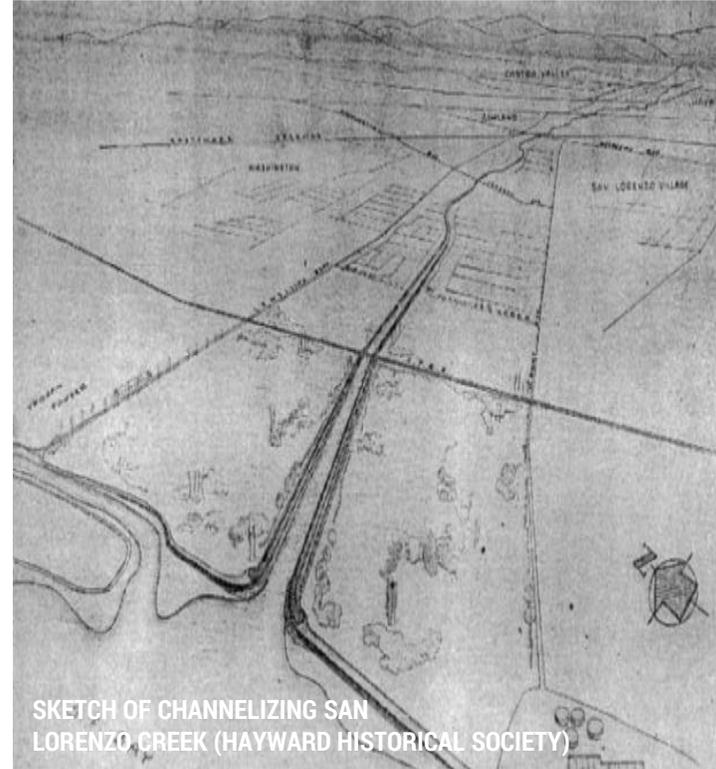
# 19<sup>TH</sup> CENTURY AGRICULTURAL REVOLUTION



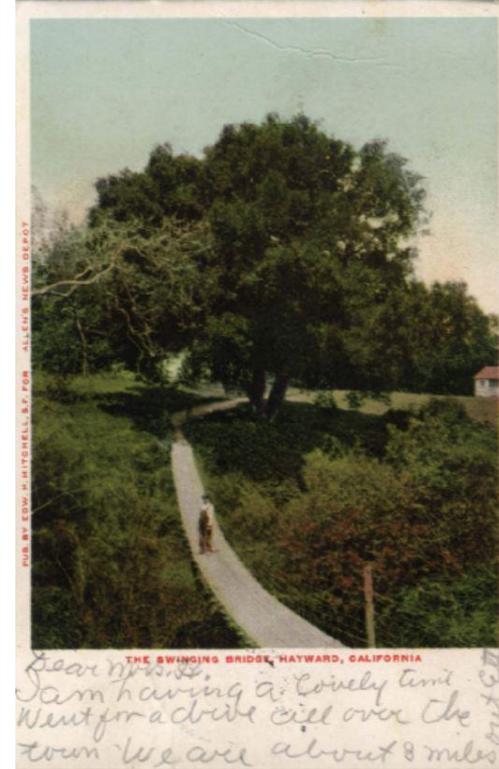
# REIMAGINING THE WATERFRONT



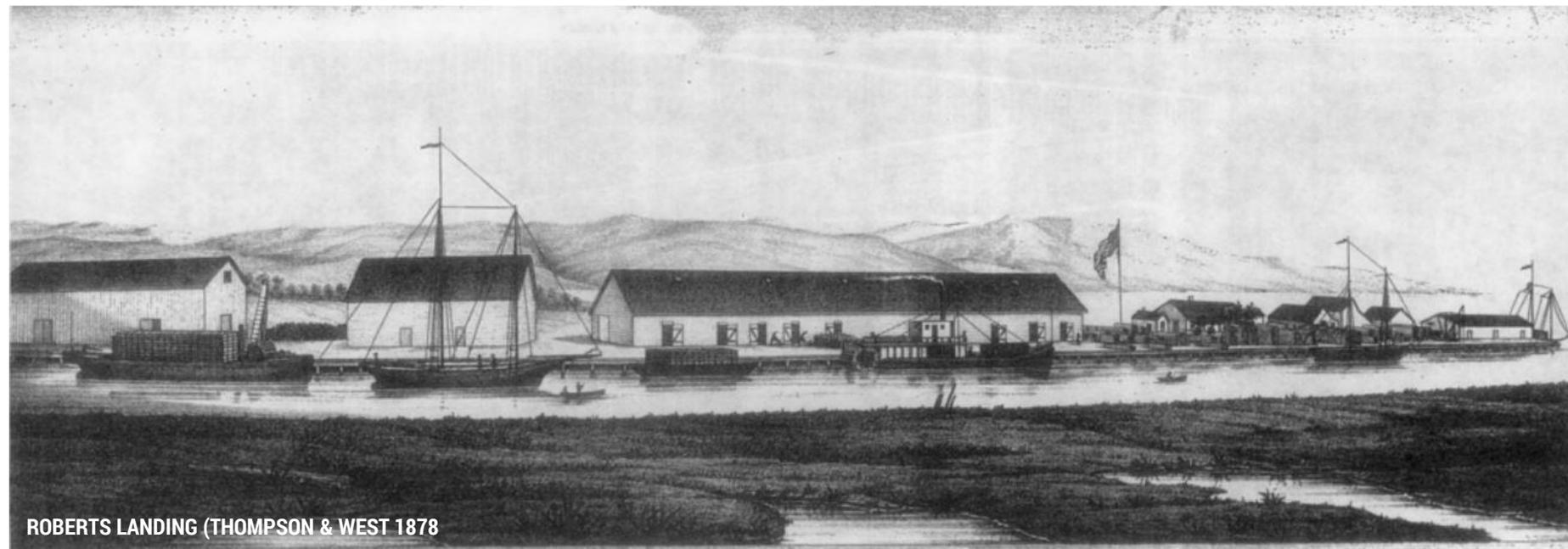
PLAN DE SAN LORENZO (CA. 1840)



SKETCH OF CHANNELIZING SAN LORENZO CREEK (HAYWARD HISTORICAL SOCIETY)

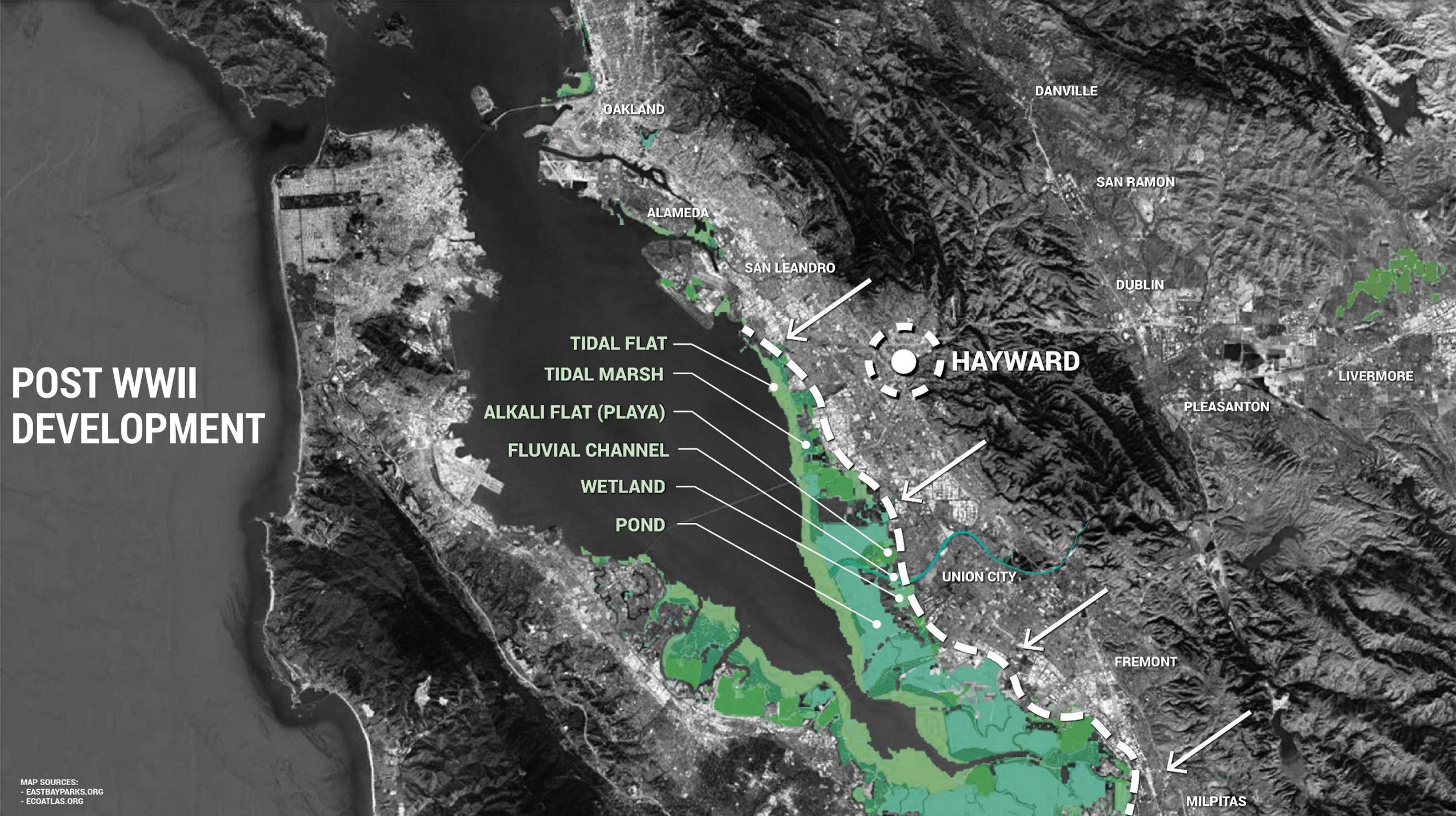


THE SWINGING BRIDGE, HAYWARD, CALIFORNIA  
Dear friends, I am having a lovely time. Went for a drive out over the town we are about 8 miles out here.  
PH. BY EDW. H. MITCHELL, S.F. FOR ALLEN'S NEWS DEPT.



ROBERTS LANDING (THOMPSON & WEST 1878)

# POST WWII DEVELOPMENT



MAP SOURCES:  
- EASTBAYPARKS.ORG  
- ECOATLAS.ORG

# PATTERNS OF CHANGE



HIGHWAY 880 CONSTRUCTION



URBAN SPRAWL UP THE EAST BAY HILLS



CALIFORNIA DROUGHT: IRRIGATION CHANNEL



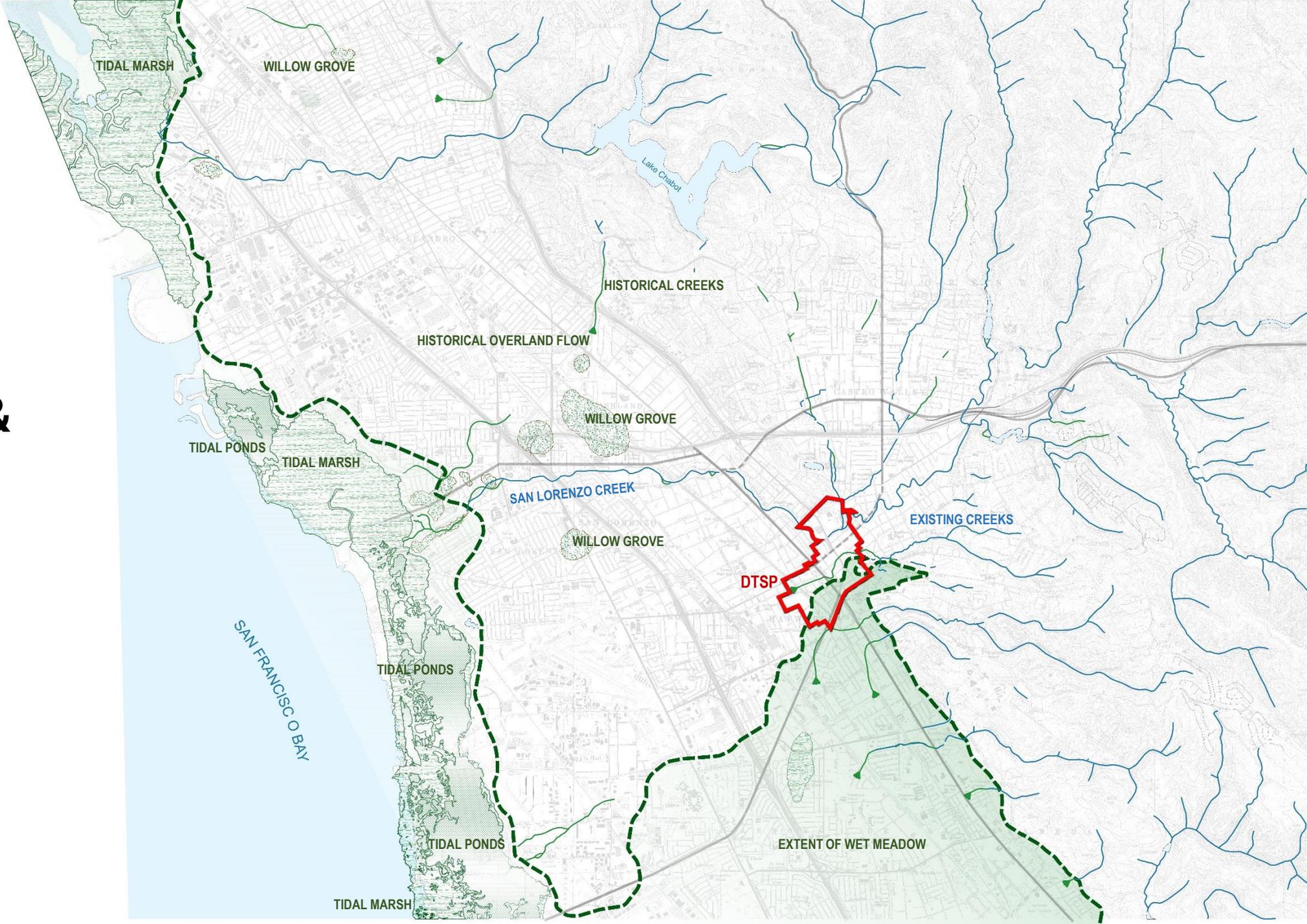
STORMDRAIN POLLUTION

**20<sup>TH</sup> CENTURY DEVELOPMENT**

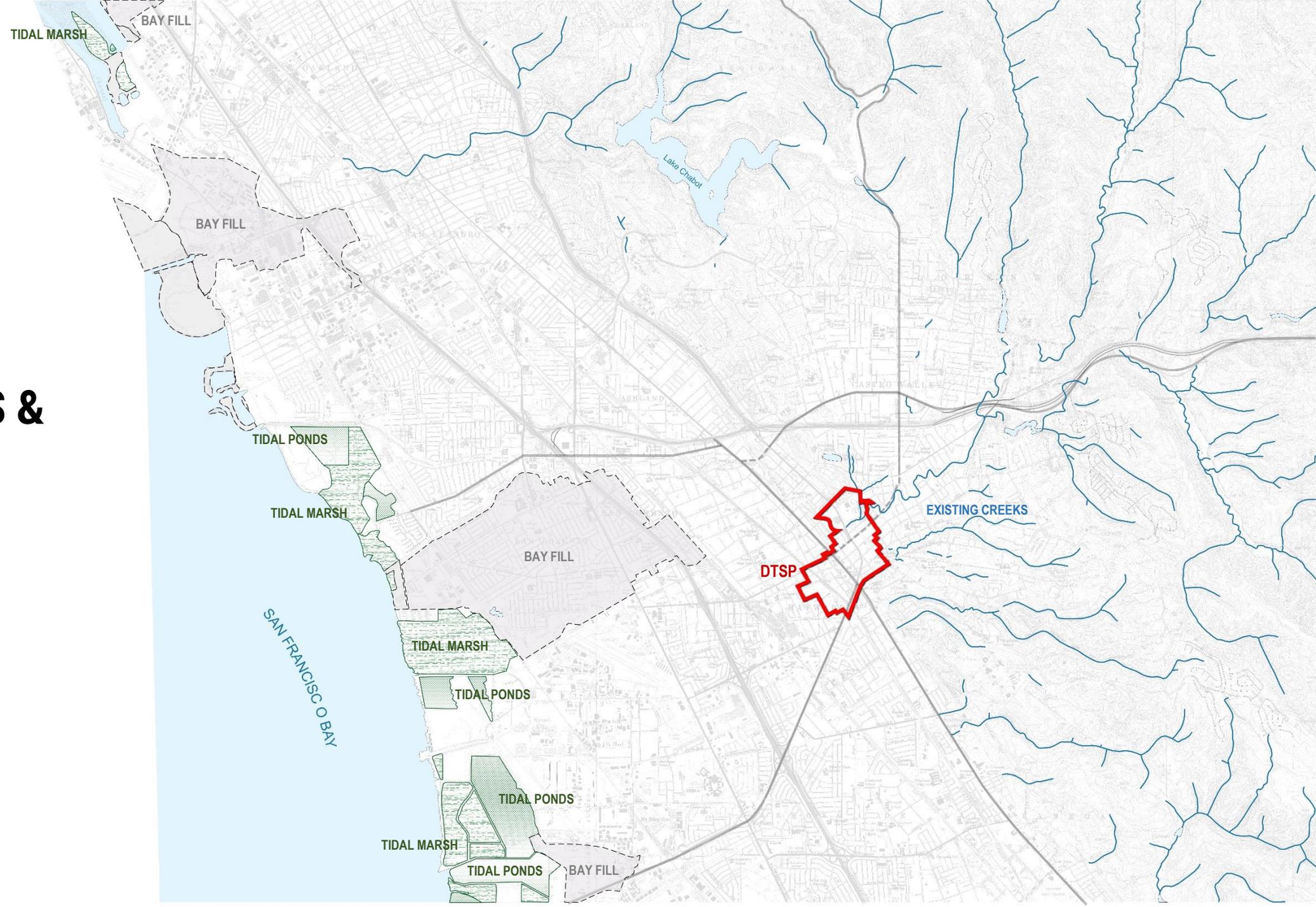
**2**



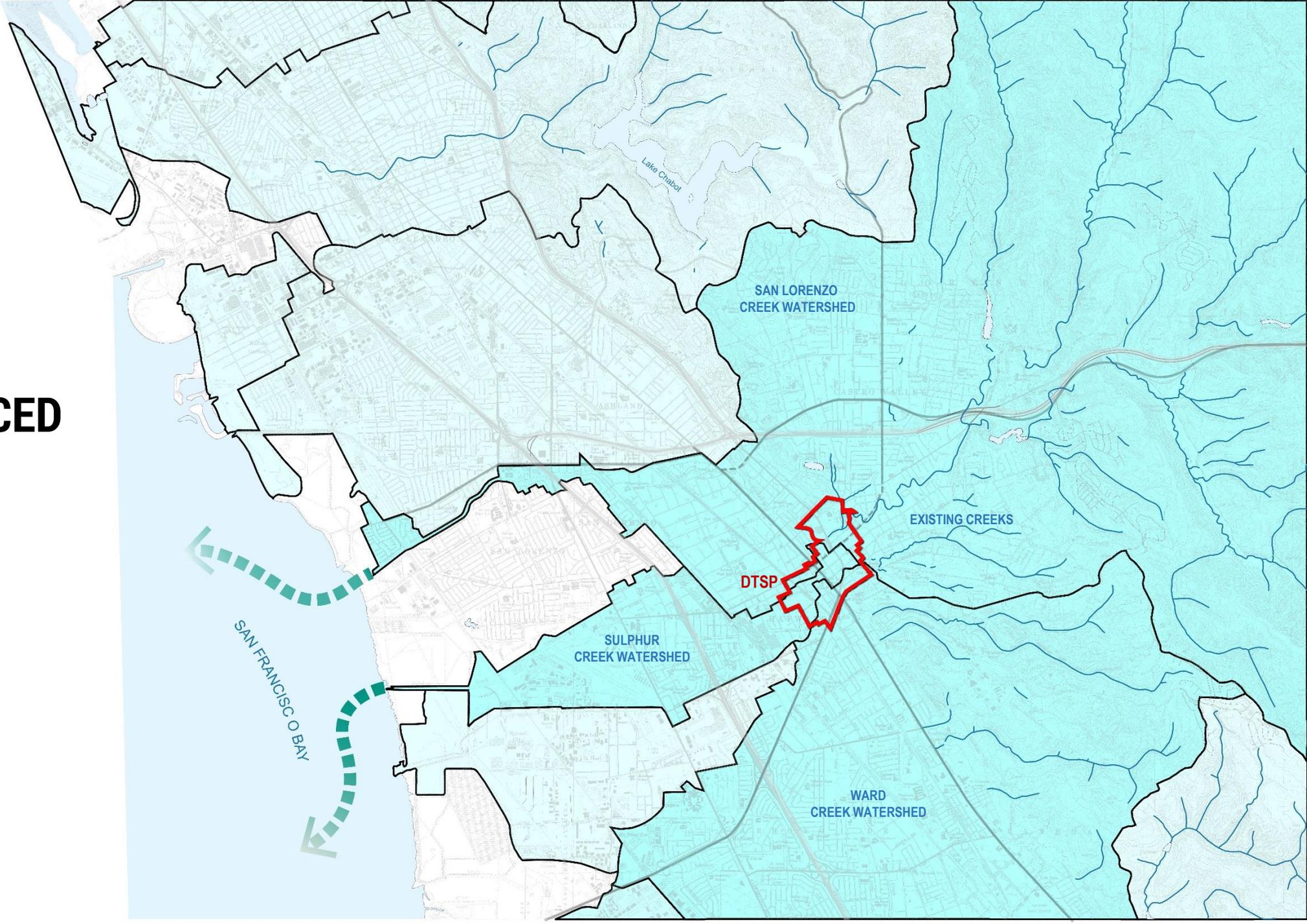
# MARSH, PONDS & WET MEADOWS HISTORICAL 1800-1900



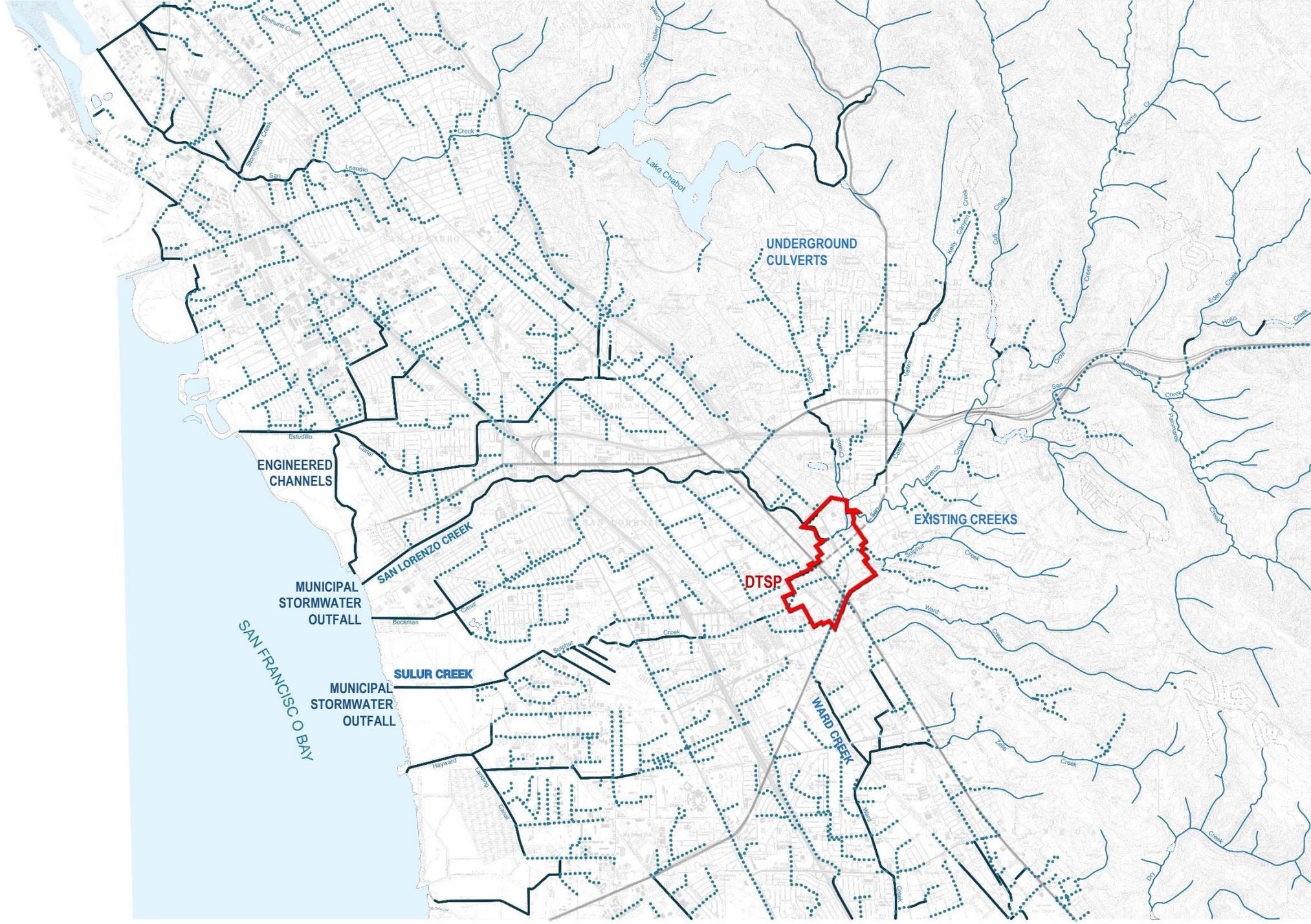
# MARSH, PONDS & WET MEADOWS PRESENT



# URBAN INFLUENCED WATERSHEDS PRESENT



# ENGINEERED CHANNELS PRESENT



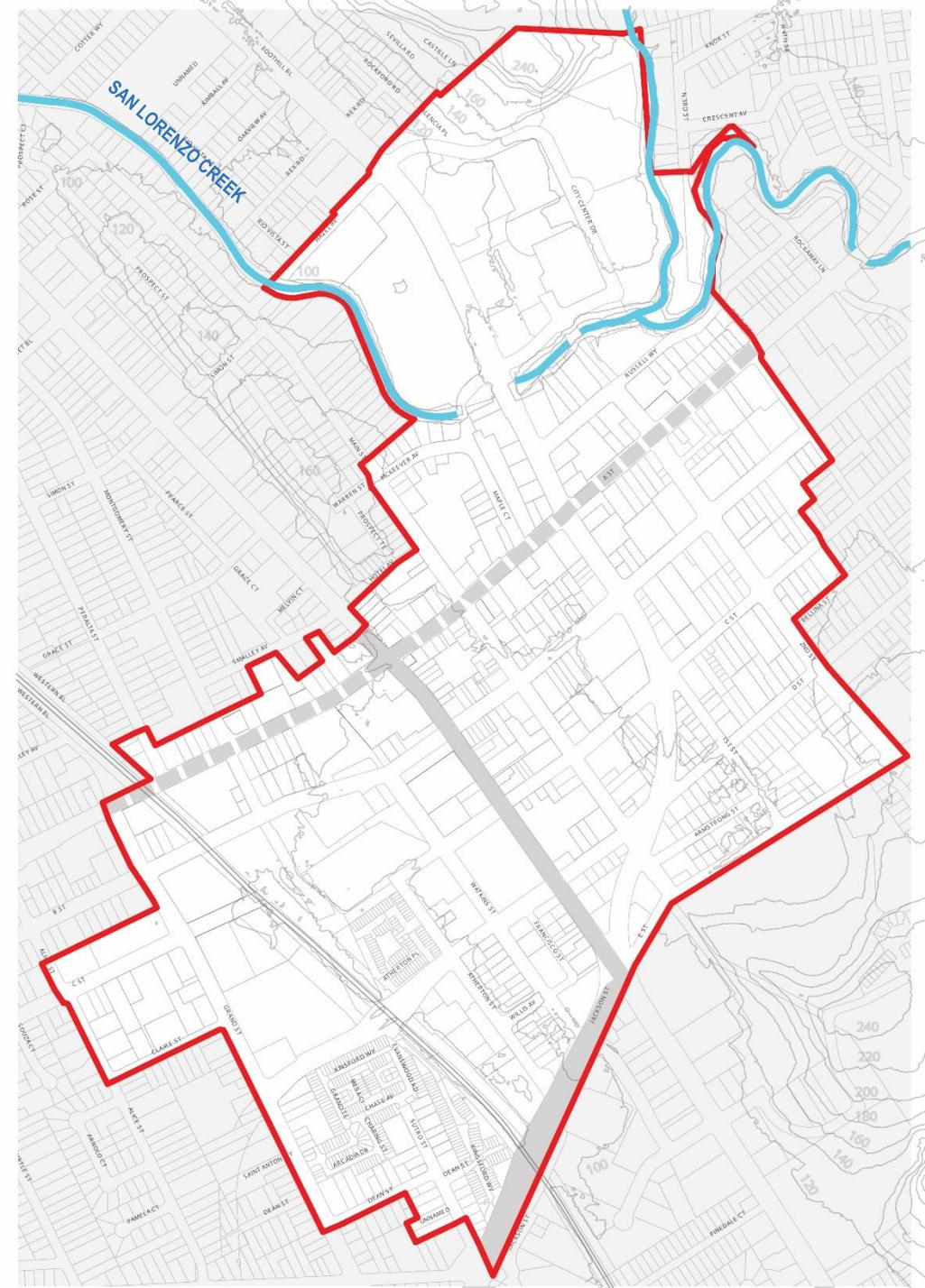
# **GREEN INFRASTRUCTURE INTEGRATION**

# **3**



# DOWNTOWN HAYWARD SPECIFIC PLAN

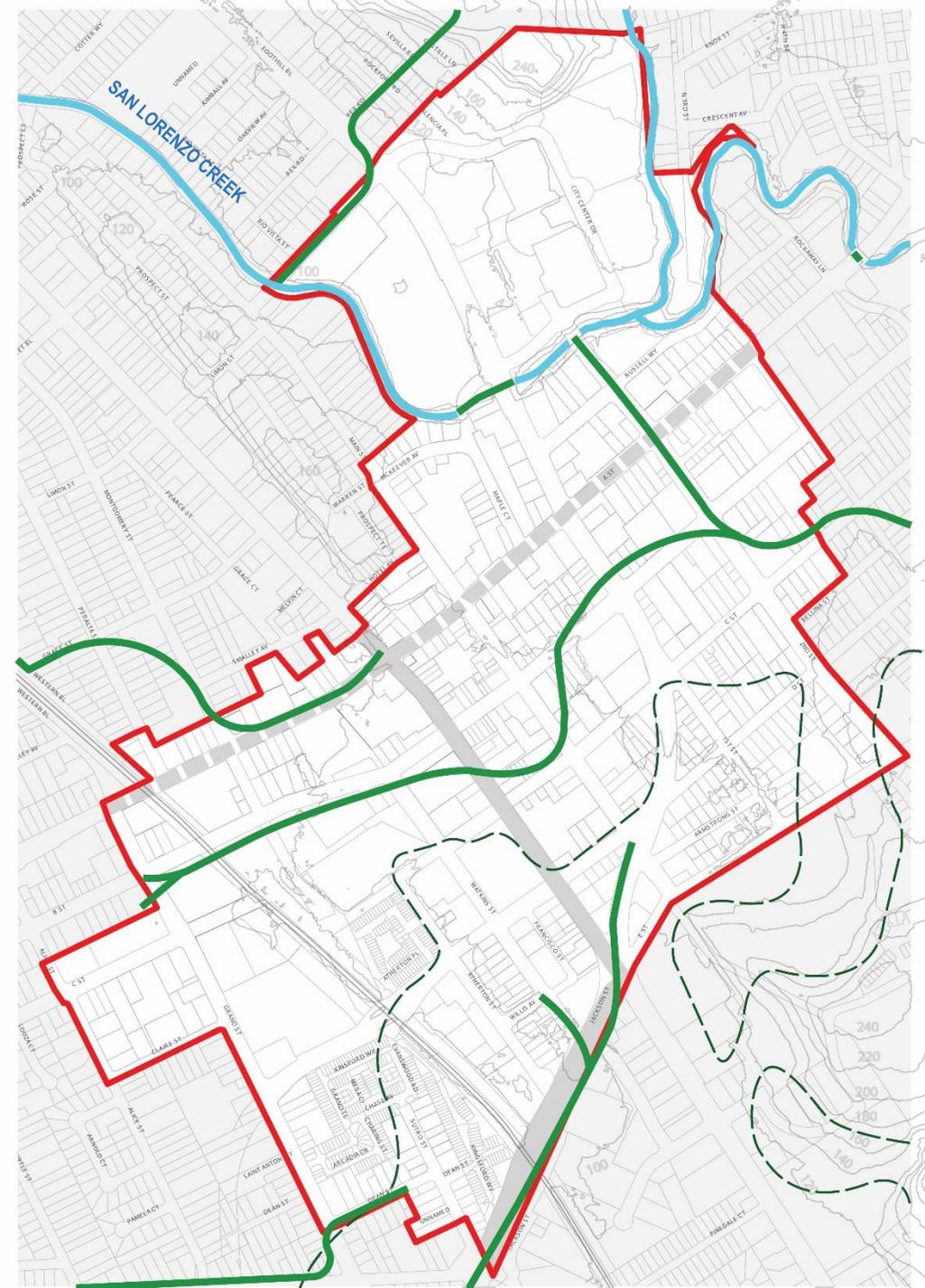
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 



# HISTORICAL HYDROLOGY

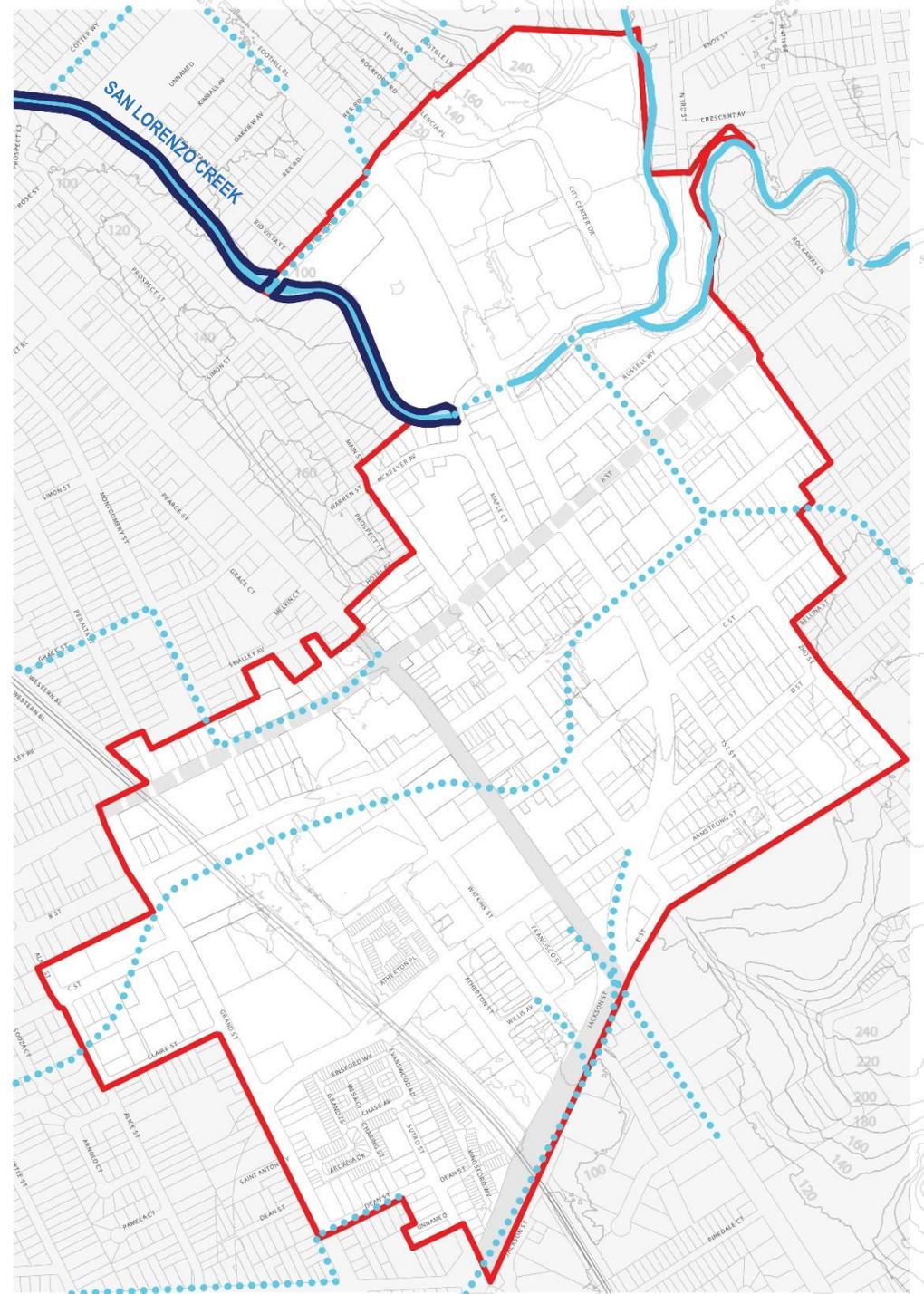
(1800-1900)

- EXTENTS OF 18<sup>TH</sup> CENTURY GRASSLAND & WET MEADOW 
- CREEKS (BURRIED OR DRAINED AT PRESENT TIME) 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 



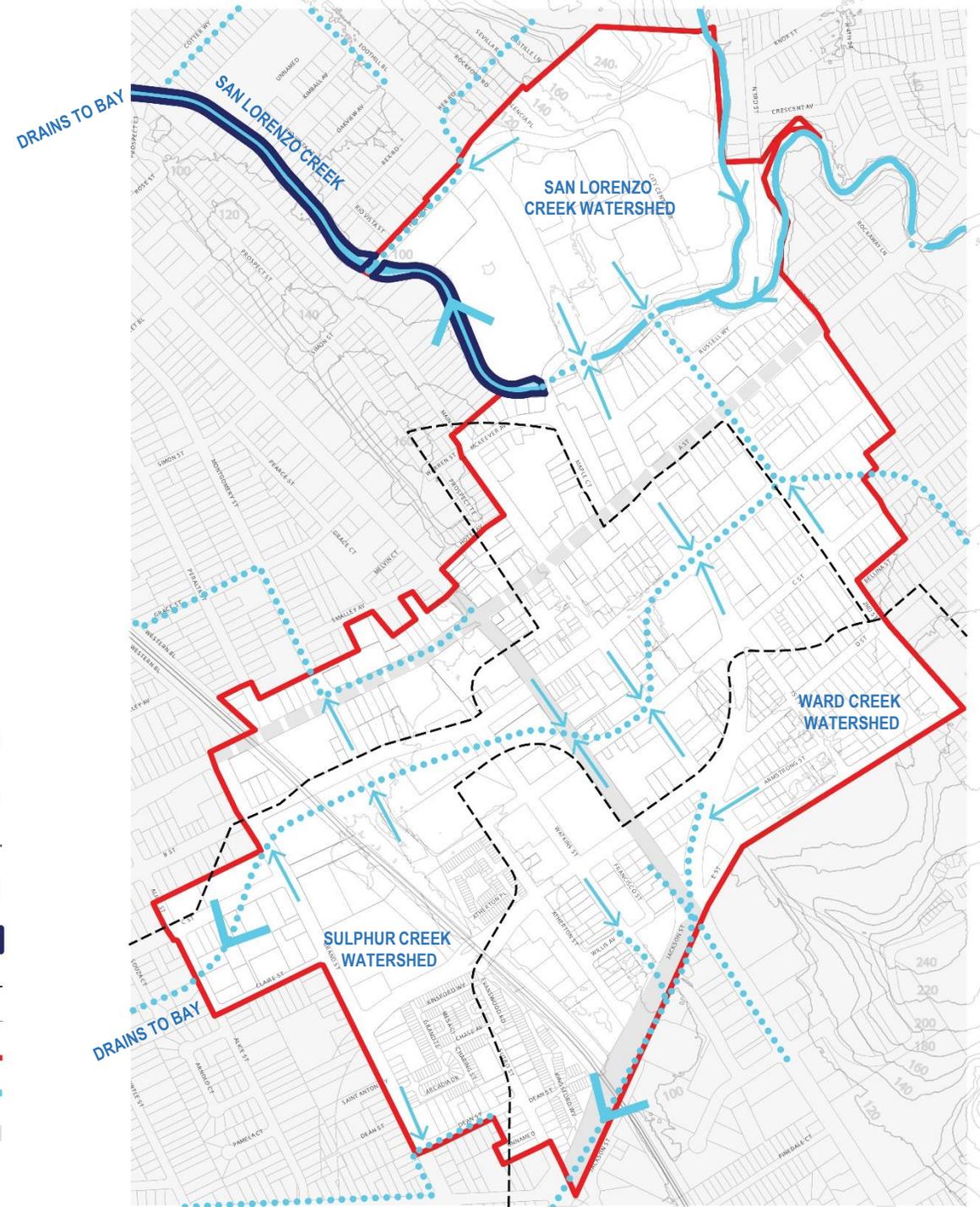
# EXISTING HYDROLOGY

- UNDERGROUND CULVERTS & STORM DRAINS  $\geq 24"$  DIAMETER 
- ENGINEERED CHANNELS 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 

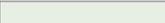


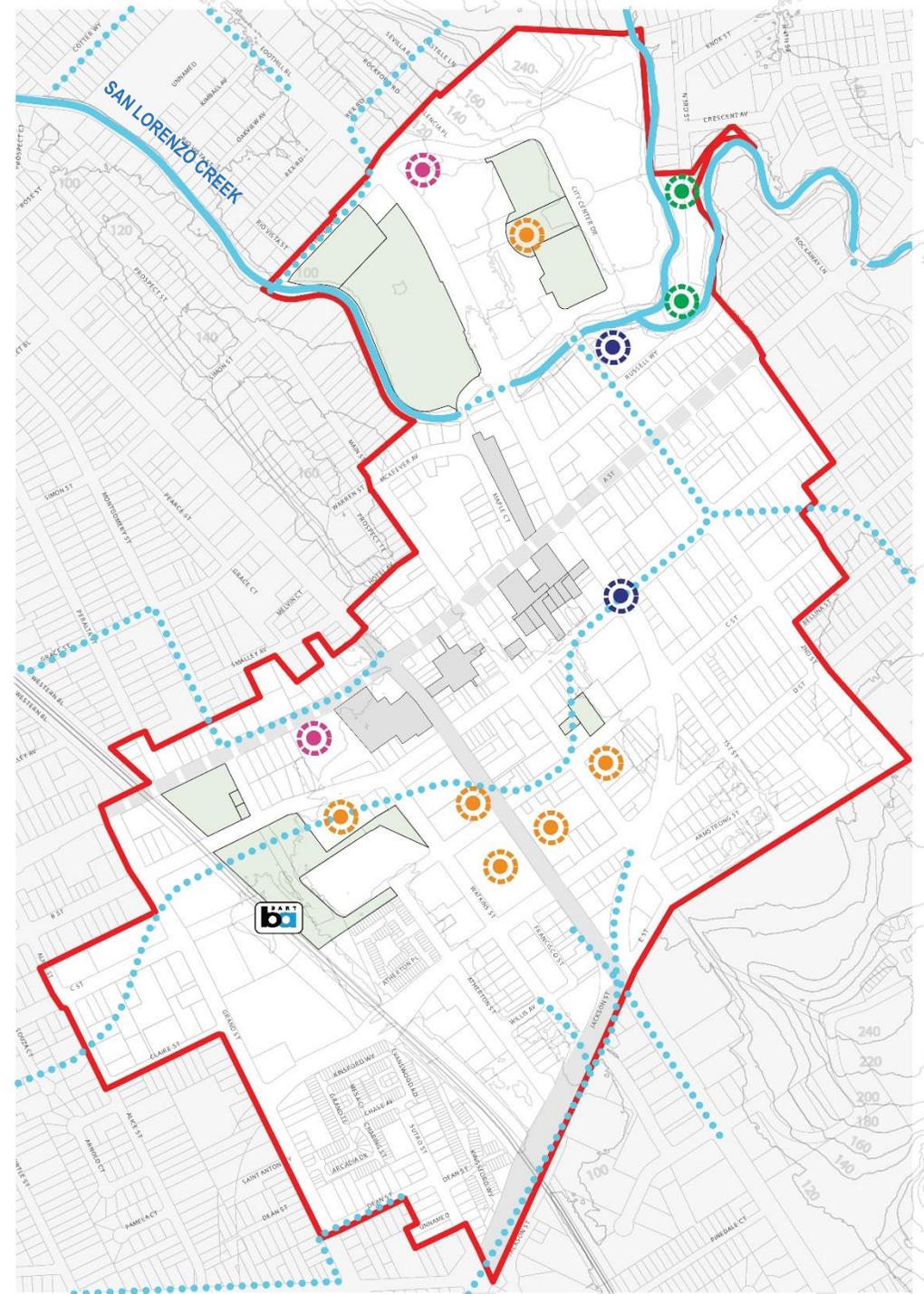
# EXISTING DRAINAGE

- WATERBODY FLOW 
- OVERLAND FLOW 
- WATERSHED BOUNDARY 
- UNDERGROUND CULVERTS & STORM DRAINS  $\geq 24"$  DIAMETER 
- ENGINEERED CHANNELS 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 



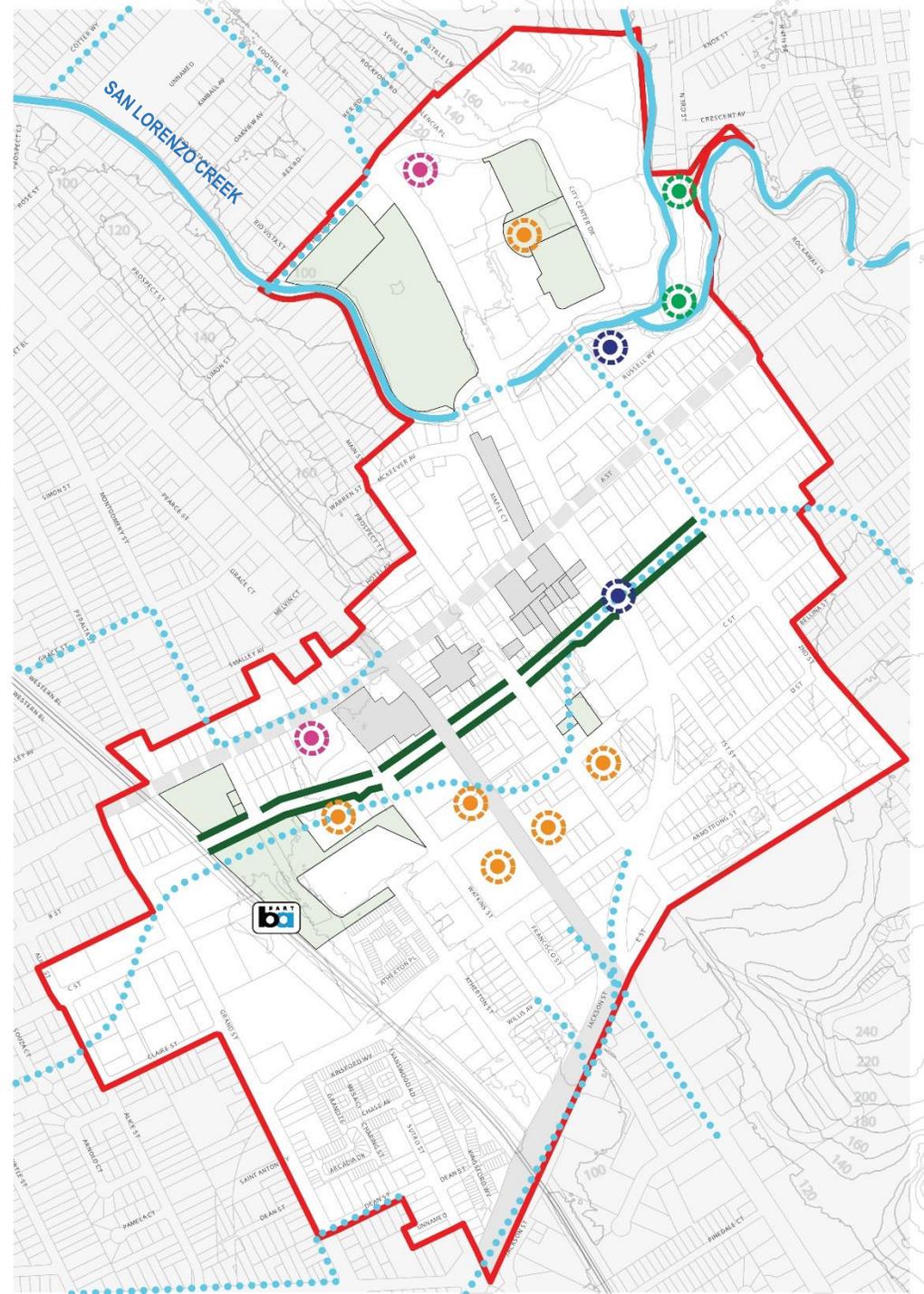
# POINTS OF INTEREST

- GROCERY STORE / MARKET 
- GOVERNMENT / MUNICIPAL BUILDING 
- PARK / OPEN SPACE 
- ART / EDUCATION 
- VACANT / "SOFT" SITE – POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- SURFACE PARKING - POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- UNDERGROUND CULVERTS & STORM DRAINS  $\geq 24"$  DIAMETER 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 

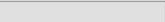


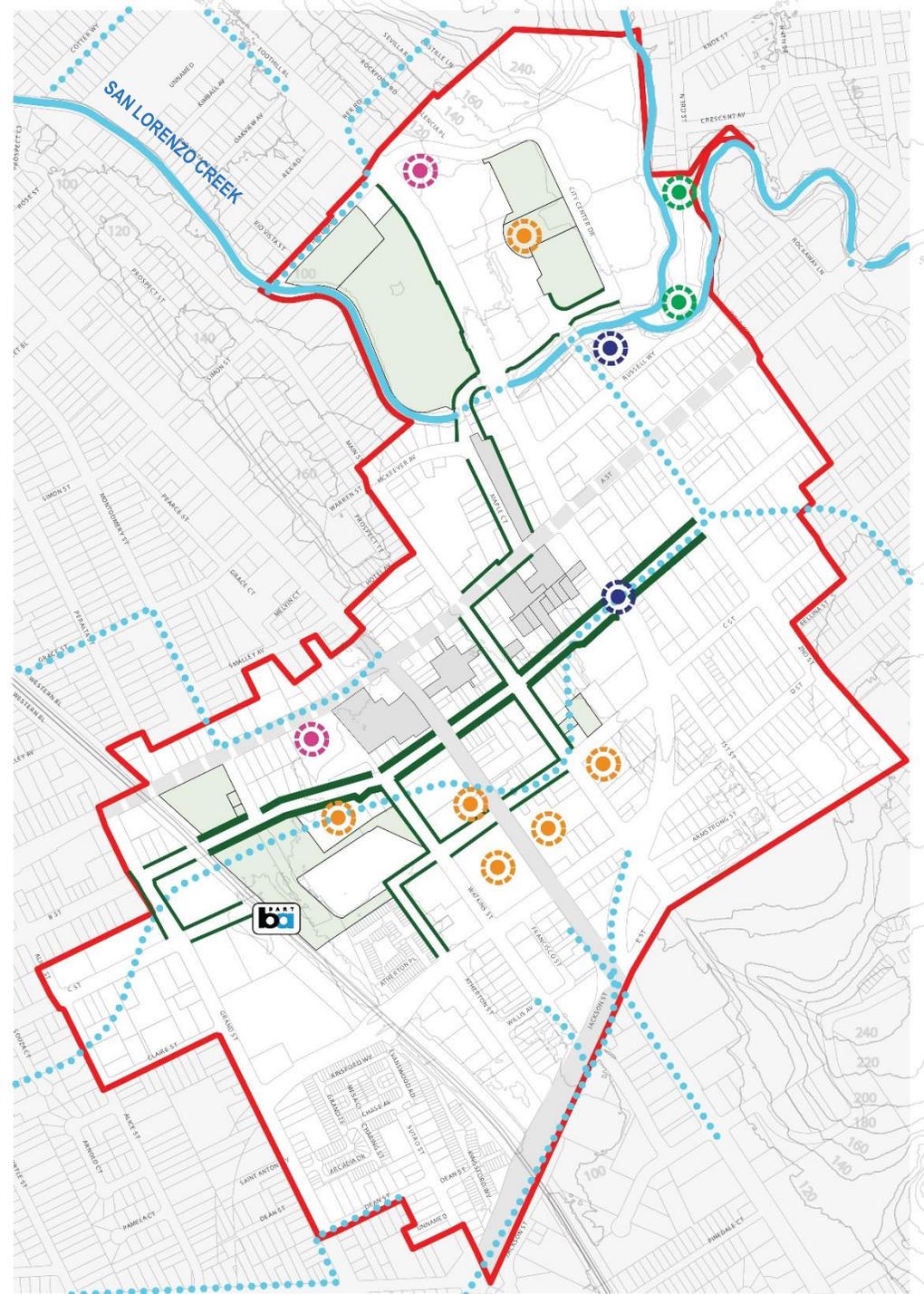
# PRIMARY GREENWAY + BLUEWAY CORRIDOR

- GROCERY STORE / MARKET 
- GOVERNMENT / MUNICIPAL BUILDING 
- PARK / OPEN SPACE 
- ART / EDUCATION 
- PRIMARY STORMWATER MANAGEMENT CORRIDOR 
- VACANT / "SOFT" SITE – POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- SURFACE PARKING - POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- UNDERGROUND CULVERTS & STORM DRAINS ≥ 24" DIAMETER 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 

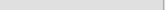


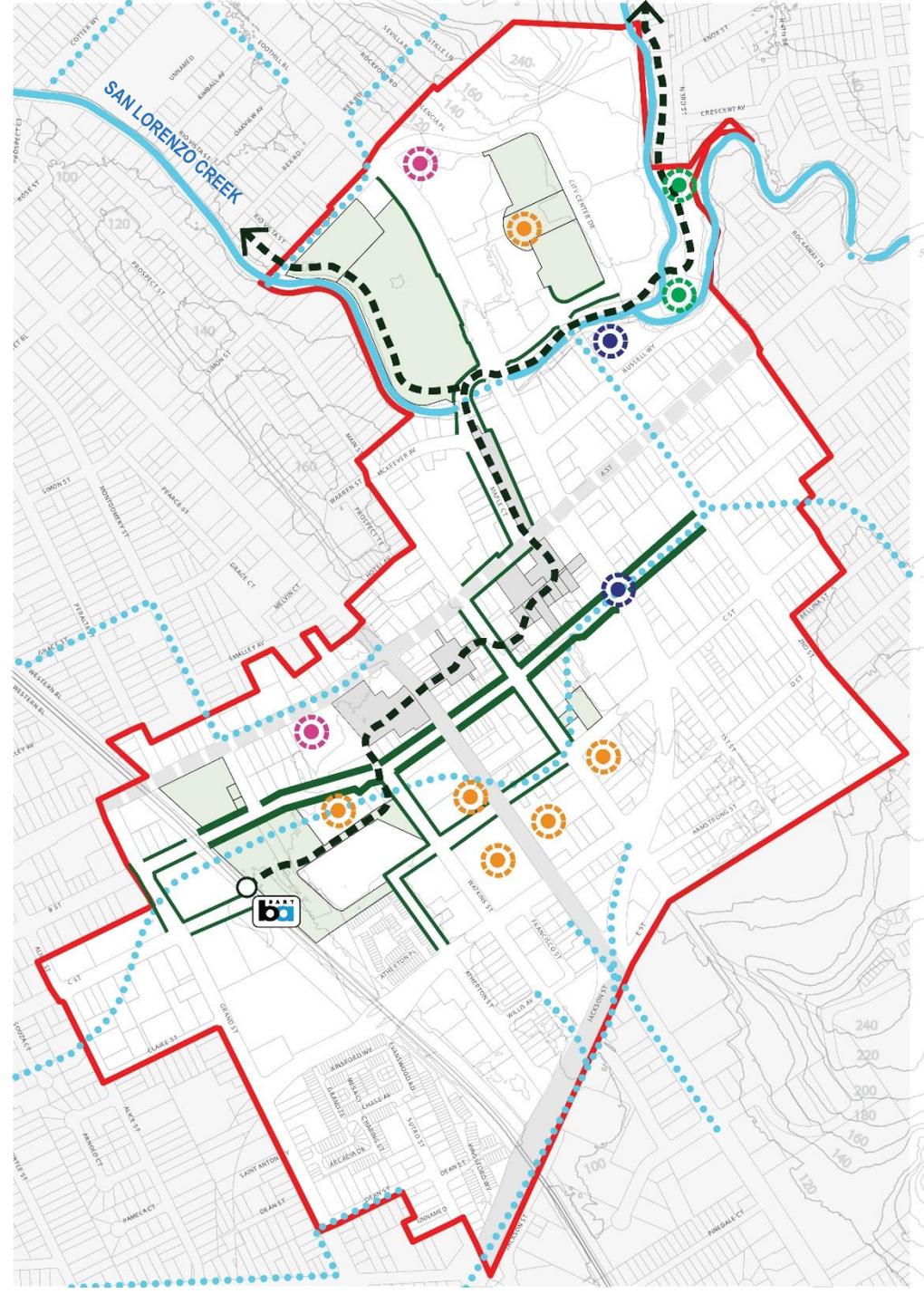
# SECONDARY GREENWAY + BLUEWAY CORRIDOR

- GROCERY STORE / MARKET 
- GOVERNMENT / MUNICIPAL BUILDING 
- PARK / OPEN SPACE 
- ART / EDUCATION 
  
- SECONDARY STORMWATER MANAGEMENT CORRIDOR 
- PRIMARY STORMWATER MANAGEMENT CORRIDOR 
- VACANT / "SOFT" SITE – POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- SURFACE PARKING - POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- UNDERGROUND CULVERTS & STORM DRAINS ≥ 24" DIAMETER 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 



# GREENWAY+ BLUEWAY MULTI-USE TRAIL

- GROCERY STORE / MARKET 
- GOVERNMENT / MUNICIPAL BUILDING 
- PARK / OPEN SPACE 
- ART / EDUCATION 
- SECONDARY STORMWATER MANAGEMENT CORRIDOR 
- PRIMARY STORMWATER MANAGEMENT CORRIDOR 
- VACANT / "SOFT" SITE – POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- SURFACE PARKING - POTENTIAL OPPORTUNITY (VIA OPTICOS) 
- UNDERGROUND CULVERTS & STORM DRAINS ≥ 24" DIAMETER 
- 20' CONTOURS 
- MUNICIPAL PARCELS 
- DHSP BOUNDARY 
- CREEKS 
- HISTORICAL TRAILS 



# **GREEN INFRASTRUCTURE CONCEPTS**

**4**

# STORMWATER TREATMENT NODE

POTENTIAL OPPORTUNITY ZONE

## LOCATION:

- HAYWARD BART STATION
- MAIN & C STREET
- 2<sup>ND</sup> & B STREETS PRIMARY CORRIDOR TERMINUS





MULTI-USE LANDSCAPES



EDIBLE FACADES

# PRIMARY CORRIDORS

POTENTIAL OPPORTUNITY ZONE



LANDSCAPED BUILDING FOOT WITH RAINGARDENS



GREEN ROOF



LANDSCAPE ON STRUCTURE

## LOCATION:

- ALONG B STREET FROM HAYWARD BART STATION TO 2<sup>ND</sup> STREET

# SECONDARY CORRIDORS

POTENTIAL OPPORTUNITY ZONE

## LOCATION:

- WEST OF HAYWARD BART STATION ALONG C STREET NORTH ON MAIN AND MAPLE CIRCLE TOWARDS DEANZA PARK AND THE JAPANESE GARDENS





BRIDGING RAIN GARDENS



FLOW-THROUGH PLANTERS



LANDSCAPED RAISED CROSSWALK



CURB CUT



PERVIOUS PAVEMENT

# MULTI-USE TRAIL

POTENTIAL OPPORTUNITY ZONE

## LOCATION:

- PERPENDICULAR TO PRIMARY AND SECONDARY CORRIDORS STRETCHING FROM HAYWARD BART STATION TOWARDS SAN LORENZO CREEK AND NORTH OF THE JAPANESE GARDENS

# VISION

POTENTIAL OPPORTUNITY ZONE

## LOCATION:

- SAN LORENZO CREEK ON CITY CENTER DRIVE AND FOOTHILL BOULEVARD

BEFORE



AFTER

